WHAT IS CLAIMED IS:

1. A method of determining whether to abort reception of a multi-part message in a code division multiple access communication system, comprising:

receiving a part of the multi-part message;

generating a correlation value by correlating the received part of the multi-part message with a known sequence;

comparing the correlation value with a threshold level; and

aborting reception of the multi-part message if the correlation value is less than a threshold level.

2. The method of claim 1, wherein the comprising step is performed as:

$$c_{\text{detection}} = \begin{cases} \text{if } \max\limits_{c\in[1,\ldots,n_c]} D(\mathrm{ML}_c, c)/\sqrt{V_c} > \tau \quad \text{then} \quad \operatorname*{maxind}\limits_{c\in[1,\ldots,n_c]}(D(\mathrm{ML}_c, c)/sqrt(V_c)) \\ \text{else no detection} \end{cases}$$

$$\mathrm{X}_{1\_\text{detection}} = \mathrm{ML}_{\text{c\_detection}}$$

wherein c is a code, $\mathrm{ML_c}$ is a maximum likelihood detection for each code c, D is a decision matrix, V_c is a variance of code c, τ is a threshold, n_c is an index corresponding to a number of codes, $\mathrm{X}_{1\_\text{detection}}$ is the resulting code word number, and $\mathrm{ML}_{\text{c\_detection}}$ is the number of the code word giving the largest correlation for spreading code c_detection.

3. The method of claim 1, wherein the comparing step is performed as:

$$c_{\text{detection}} = \begin{cases} \text{if } \max\limits_{c\in[1,\ldots,n_c]} D(\mathrm{ML}_c, c)/S_c > \tau \quad \text{then} \quad \operatorname*{maxind}\limits_{c\in[1,\ldots,n_c]}(D(\mathrm{ML}_c, c)/S_c) \\ \text{else no detection} \end{cases}$$

$$\mathrm{X}_{1\_\text{detection}} = \mathrm{ML}_{\text{c\_detection}}$$

where

$$S_c = 1/\text{length}(D(:,c)) \sum_{i=\text{all elements excl. } ML_c} |D(i,c)|$$

wherein c is a code, ML_c is a maximum likelihood detection for each code c, D is a decision matrix, S_c is a standard deviation of code c, τ is a threshold, n_c is an index corresponding to a number of codes, $X_{1\_detection}$ is the resulting code word number, and $ML_{c\_detection}$ is the number of the code word giving the largest correlation for spreading code c_detection.

4. The method of claim 1, wherein the comparing step is performed by comparing a ratio between a highest correlation and a second highest correlation with a threshold.

5. The method of claim 1, further comprising:

dynamically adjusting the threshold level based on a communication traffic behavior.

6. The method of claim 5, wherein the communication traffic behavior is whether traffic directed to a particular user equipment (UE) is part of a burst directed to that UE.

7. The method of claim 6, wherein detecting whether traffic directed to the particular UE is part of a burst directed to that UE comprises:

detecting whether the UE has been addressed at any time during a number, n, of the most recent transmission time intervals.

8. The method of claim 7, wherein the number, n, is equal to 10.

9. The method of claim 5, wherein the communication traffic behavior accounts for the recentness of traffic addressed to a particular UE.

10. The method of claim 5, wherein the threshold level is permitted to assume any one of a plurality of possible threshold levels.

11. The method of claim 10 comprising:

if it is detected that traffic directed to the particular UE is part of a burst directed to that UE, then ensuring that the threshold level takes on a lower one of the plurality of possible threshold levels; and

if it is not detected that traffic directed to the particular UE is part of a burst directed to that UE, then ensuring that the threshold level takes on a higher one of the plurality of possible threshold levels.

12. The method of claim 10, wherein the plurality of possible threshold levels consists of a low threshold level and a high threshold level.

13. The method of claim 10, wherein an intermediate threshold is set to one of the plurality of possible threshold levels, and the intermediate threshold is filtered.

14. The method of claim 1, wherein the code division multiple access communication system is a High Speed Downlink Packet Access (HSDPA) system.

15. The method of claim 14, wherein the part of the multi-part message is a High Speed Shared Control Channel Part 1 (HS-SCCH Part 1) message.

16. The method of claim 15, wherein:

the HSDPA system includes a full set of possible known sequences;

the correlation value is one of a set of correlation values that are generated by correlating each of a reduced set of possible known sequences against the HS-SCCH Part 1 message; and

the reduced set of possible known sequences is generated from the full set of possible known sequences.

17. The method of claim 16, wherein the reduced set of possible known sequences includes only those known sequences that signify something meaningful.

18. The method of claim 16, wherein:

the reduced set of possible known sequences includes only those known sequences that are associated with one or more capabilities of a first User Equipment (UE); and

the full set of possible known sequences includes at least one known sequence that is not associated with one or more capabilities of the first UE, and the at least one known sequence is associated with one or more capabilities of a second UE.

19. A method of decoding a High Speed Shared Control Channel Part 1 (HS-SCCH Part 1) message in a High Speed Downlink Packet Access (HSDPA) system that includes a full set of possible codewords, the method comprising:

receiving the HS-SCCH Part 1 message;

generating a set of correlation values by correlating each of a reduced set of possible codewords against the received HS-SCCH Part 1 message; and

selecting as a decoded value that one of the reduced set of possible codewords that is associated with a highest one of the correlation values,

wherein the reduced set of possible codewords is generated from the full set of possible codewords.

20. The method of claim 19, wherein the reduced set of possible codewords includes only those codewords that signify something meaningful.

21. The method of claim 19, wherein:

the reduced set of possible codewords includes only those codewords that are associated with one or more capabilities of a first User Equipment (UE); and

the full set of possible codewords includes at least one codeword that is not associated with one or more capabilities of the first UE, and the at least one codeword is associated with one or more capabilities of a second UE.

22. An apparatus that determines whether to abort reception of a multi-part message in a code division multiple access communication system, the apparatus comprising:

logic that receives a part of the multi-part message;

logic that generates a correlation value by correlating the received part of the multi-part message with a known sequence;

logic that compares the correlation value with a threshold level; and

logic that aborts reception of the multi-part message if the correlation value is less than a threshold level.

23. The apparatus of claim 22, wherein the logic that compares performs:

$$c_{\text{detection}} = \begin{cases} \text{if } \max\limits_{c \in [1,\dots,n_c]} D(\mathrm{ML}_c, c)/\sqrt{V_c} > \tau \quad \text{then} \quad \operatorname*{maxind}\limits_{c \in [1,\dots,n_c]}(D(\mathrm{ML}_c, c)/sqrt(V_c)) \\ \text{else no detection} \end{cases}$$

$$\mathrm{X}_{1\_\text{detection}} = \mathrm{ML}_{c\_\text{detection}}.$$

wherein c is a code, ML_c is a maximum likelihood detection for each code c, D is a decision matrix, V_c is a variance of code c, τ is a threshold, n_c is an index corresponding to a number of codes, $X_{1\_detection}$ is the resulting code word number, and $ML_{c\_detection}$ is the number of the code word giving the largest correlation for spreading code c_detection.

24. The apparatus of claim 22, wherein the logic that compares performs:

$$c_{\text{detection}} = \begin{cases} \text{if } \max\limits_{c \in [1,\dots,n_c]} D(\mathrm{ML}_c, c)/S_c > \tau \quad \text{then} \quad \operatorname*{maxind}\limits_{c \in [1,\dots,n_c]}(D(\mathrm{ML}_c, c)/S_c) \\ \text{else no detection} \end{cases}$$

$$\mathrm{X}_{1\_\text{detection}} = \mathrm{ML}_{c\_\text{detection}}$$

where

$$S_c = 1/\text{length}(D(:,c)) \sum_{i=\text{all elements excl. ML}_c} |D(i,c)|$$

wherein c is a code, ML_c is a maximum likelihood detection for each code c, D is a decision matrix, S_c is a standard deviation of code c, τ is a threshold, n_c is an index corresponding to a number of codes, $X_{1\_detection}$ is the resulting code word number, and $ML_{c\_detection}$ is the number of the code word giving the largest correlation for spreading code c_detection.

25. The apparatus of claim 22, wherein the logic that compares a ratio between a highest correlation and a second highest correlation with a threshold.

26. The apparatus of claim 22, further comprising:

logic that dynamically adjusts the threshold level based on a communication traffic behavior.

27. The apparatus of claim 26, wherein the communication traffic behavior is whether traffic directed to a particular user equipment (UE) is part of a burst directed to that UE.

28. The apparatus of claim 27, wherein the logic that detects whether traffic directed to the particular UE is part of a burst directed to that UE comprises:

logic that detects whether the UE has been addressed at any time during a number, n, of the most recent transmission time intervals.

29. The apparatus of claim 28, wherein the number, n, is equal to 10.

30. The apparatus of claim 26, wherein the communication traffic behavior accounts for the recentness of traffic addressed to a particular UE.

31. The apparatus of claim 26, wherein the threshold level is permitted to assume any one of a plurality of possible threshold levels.

32. The apparatus of claim 31 comprising:

logic that ensures that the threshold level takes on a lower one of the plurality of possible threshold levels if it is detected that traffic directed to the particular UE is part of a burst directed to that UE; and

logic that ensures that the threshold level takes on a higher one of the plurality of possible threshold levels if it is not detected that traffic directed to the particular UE is part of a burst directed to that UE.

33. The apparatus of claim 31, wherein the plurality of possible threshold levels consists of a low threshold level and a high threshold level.

34. The apparatus of claim 31, wherein an intermediate threshold is set to one of the plurality of possible threshold levels, and the intermediate threshold is filtered.

35. The apparatus of claim 22, wherein the code division multiple access communication system is a High Speed Downlink Packet Access (HSDPA) system.

36. The apparatus of claim 35, wherein the part of the multi-part message is a High Speed Shared Control Channel Part 1 (HS-SCCH Part 1) message.

37. The apparatus of claim 36, wherein:

the HSDPA system includes a full set of possible known sequences;

the correlation value is one of a set of correlation values that are generated by correlating each of a reduced set of possible known sequences against the HS-SCCH Part 1 message; and

the reduced set of possible known sequences is generated from the full set of possible known sequences.

38. The apparatus of claim 37, wherein the reduced set of possible known sequences includes only those known sequences that signify something meaningful.

39. The apparatus of claim 37, wherein:

the reduced set of possible known sequences includes only those known sequences that are associated with one or more capabilities of a first User Equipment (UE); and

the full set of possible known sequences includes at least one known sequence that is not associated with one or more capabilities of the first UE, and the

at least one known sequence is associated with one or more capabilities of a second UE.

40. An apparatus that decodes a High Speed Shared Control Channel Part 1 (HS-SCCH Part 1) message in a High Speed Downlink Packet Access (HSDPA) system that includes a full set of possible codewords, the apparatus comprising:

logic that receives the HS-SCCH Part 1 message;

logic that generates a set of correlation values by correlating each of a reduced set of possible codewords against the received HS-SCCH Part 1 message; and

logic that selects as a decoded value that one of the reduced set of possible codewords that is associated with a highest one of the correlation values,

wherein the reduced set of possible codewords is generated from the full set of possible codewords.

41. The apparatus of claim 40, wherein the reduced set of possible codewords includes only those codewords that signify something meaningful.

42. The method of claim 40, wherein:

the reduced set of possible codewords includes only those codewords that are associated with one or more capabilities of a first User Equipment (UE); and

the full set of possible codewords includes at least one codeword that is not associated with one or more capabilities of the first UE, and the at least one codeword is associated with one or more capabilities of a second UE.

43. A machine readable storage medium having stored thereon one or more instructions that cause a processor to determine whether to abort reception of a multi-part message in a code division multiple access communication system, the one or more instructions causing the processor to perform:

receiving a part of the multi-part message;

generating a correlation value by correlating the received part of the multi-part message with a known sequence;

comparing the correlation value with a threshold level; and

aborting reception of the multi-part message if the correlation value is less than a threshold level.

44. The machine-readable storage medium of claim 43, wherein the one or more instructions further include instructions that cause the processor to perform:

dynamically adjusting the threshold level based on a communication traffic behavior.

45. The machine-readable storage medium of claim 44, wherein the communication traffic behavior is whether traffic directed to a particular user equipment (UE) is part of a burst directed to that UE.

46. The machine readable storage medium of claim 45, wherein detecting whether traffic directed to the particular UE is part of a burst directed to that UE comprises:

detecting whether the UE has been addressed at any time during a number, *n*, of the most recent transmission time intervals.

47. A machine readable storage medium having stored thereon one or more instructions that cause a processor to decode a High Speed Shared Control Channel Part 1 (HS-SCCH Part 1) message in a High Speed Downlink Packet Access (HSDPA) system that includes a full set of possible codewords, the one or more instructions causing the processor to perform:

receiving the HS-SCCH Part 1 message;

generating a set of correlation values by correlating each of a reduced set of possible codewords against the received HS-SCCH Part 1 message; and

selecting as a decoded value that one of the reduced set of possible codewords that is associated with a highest one of the correlation values,

wherein the reduced set of possible codewords is generated from the full set of possible codewords.